#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023106 Address: 333 Burma Road **Date Inspected:** 13-Apr-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Gang Wei No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

This QA Inspector randomly observed the following work in progress.

**OBG 14EAST** 

#### SHIELDED METAL ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044779 performing the Shielded Metal Arc Welding process on weld 081 located at PCMK SEG3019L. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-B-u2-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037723 performing the Shielded Metal Arc Welding process on weld 061 located at PCMK SEG3019L. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with

## WELDING INSPECTION REPORT

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WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 501946 performing the Shielded Metal Arc Welding process on weld 039 located at PCMK SEG3019H. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-B-u2b-Fcm-1.

#### FLUX CORED ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 009 located at PCMK SEG3019E-1. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067877 performing the Flux Cored Arc Welding process on weld 010 located at PCMK SEG3019D-1. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066733 performing the Flux Cored Arc Welding process on weld 010 located at PCMK SEG3019E-1. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066163 performing the Flux Cored Arc Welding process on weld 003 located at PCMK SEG3019S. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

#### REPAIR WELDING

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 043661 performing the Shielded Metal Arc Welding process on weld 111 located at PCMK SEG3019BB. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-Fcm-Repair-1. Weld repair report identified as B-WR20589.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066418 performing the Shielded Metal Arc Welding process on weld 073 located at PCMK SEG3019Z. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-Fcm-Repair-1. Weld repair report identified as B-WR20572.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer